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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/691,917	10/23/2003	Ruchika Singhal	1023-234US01	6514

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EXAMINER

KAHELIN, MICHAEL WILLIAM

ART UNIT	PAPER NUMBER
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3762

MAIL DATE	DELIVERY MODE
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07/09/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/691,917

Applicant(s)

SINGHAL ET AL.

Examiner

Michael Kahelin

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 12 March 2007.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,5-19,23-38 and 42-56 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,5-19,23-38 and 42-56 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- ☐ Notice of Informal Patent Application
- ☐ Other: _____

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 3/12/2007 has been entered.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1, 6, 8-13, 19, 23, 27-30, 35, 36, 38, 43-46, 50, 52, and 54-56 are rejected under 35 U.S.C. 102(b) as being anticipated by Meadows et al. (US 6,381,496, hereinafter "Meadows").

4. In regards to claims 1, 6, 19, 23, 27, 38, 55, and 56, Meadows discloses monitoring the output of a posture sensor and defining an event based on the sensor output (col. 17, line 66; "e.g. horizontal"); monitoring therapy, generating therapy information, and associating therapy information with the event (col. 19, lines 1-19; the

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"OPS" defined by the patient is monitored, saved, and associated with the event); and subsequently detecting the defined event and automatically providing therapy to the patient accordingly (col. 18, lines 6-12; the "OPS" defined by the patient and associated with an event is provided).

5. In regards to claims 8, 9, 10, 28, 29, 43, 44, and 45, generating therapy information comprises recording the value/change to a parameter of a therapy parameter, over the time period that the patient is operating the programmer (col. 18, line 55-col. 19, line 19).

6. In regards to claims 11, 30 and 46, the therapy can be delivered based on a combination of events, two of which are an elapsed time and posture change (col. 18, line 5).

7. In regards to claims 12 and 36, the change to the parameter is made with a programming device (Fig. 8).

8. In regards to claims 13 and 35, the parameter is one of amplitude, pulse width, and pulse rate of a neurostimulator (col. 19, line 16).

9. In regards to claims 50, 52, and 54, the device controls pain (col. 1, line 12).

Claim Rejections - 35 USC § 103

10. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

11. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

12. Claims 5, 7, 14-18, 24-26, 31-34, 37, 42, 47-49, 51, and 53 rejected under 35 U.S.C. 103(a) as being unpatentable over Meadows. Meadows discloses the essential features of the claimed invention except for determining position with a multi-axis accelerometer; defining the event by recording the sensor over a period of time; receiving the time delay parameter/command to enter a learning mode from a user; suspending therapy based on the event; or presenting the defined event in a timing diagram to a clinician as diagnostic data. It is well known in the art to determine position with multi-axis accelerometers to determine activity or posture with an inexpensive, off-the-shelf component; to define an event by recording a sensor over time to customize events to a particular patient/implantation configuration; to receive various parameters or commands (such as the time delay of Meadows' col. 18, line 2) from a user to provide customized therapy; to suspend therapy based on events to conserve battery power when therapy is not needed; and to present events on timing diagrams to clinicians to allow the clinician to modify device parameters to effectuate

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ideal therapies. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Meadows' invention by providing a means to determine position with multi-axis accelerometers to determine activity or posture with an inexpensive, off-the-shelf component; to define an event by recording a sensor over time to customize events to a particular patient/implantation configuration; to receive various parameters or commands from a user to provide customized therapy; to suspend therapy based on events to conserve battery power when therapy is not needed; and to present events on timing diagrams to clinicians to allow the clinician to modify device parameters to effectuate ideal therapies.

Response to Arguments

13. Applicant's arguments with respect to claims 1, 5-19, 23-38 and 42-56 have been considered but are moot in view of the new ground(s) of rejection, necessitated by amendment.

Conclusion

14. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Pianca et al. (US 6,466,821) is one of many teachings of determining position/events by monitoring a multi-axis accelerometer over time and Schallhorn is one of many teachings of providing activity data in timing diagrams.

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael Kahelin whose telephone number is (571) 272-8688. The examiner can normally be reached on M-F, 9-5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Angela Sykes can be reached on (571) 272-4955. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

MWK

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6/18/07

GEORGE R. EVANISKO
PRIMARY EXAMINER

6/29/07